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REMARKS

Pending Claims

Entry of this amendment is respectfully requested. Upon entry of this Response, the claims 1-5 and 7-25 are pending. Claims 1 and 21 are amended herein. All claims depend from one of independent claims 1 or 21 and therefore are amended through dependency.

Discussion of the Prior Art Applied by the Examiner

In the ancient art of papermaking pulp fibers are laid wet on a forming wire and the water is sequentially pressed scraped and other wise driven out of the web with heat and the like. Most of the machinery and expense of papermaking is devoted to water removal. The concomitant benefit is the great web strength caused by the hydrogen bond formed in the initial creation of the web.

The air laid web art applied by the Examiner are efforts to improve the tensile strength and other mechanical properties of a foraminious web by adding additional carefully delimited elements to the mix under well controlled conditions. Schmidt '525 adds a polymer binder that is first dried and then heated to thermally bond the web together. The binder is uniformly present in the web and the strength of the web is based on the binder. To the Applicant's attorney the final product appears to have the mechanical properties of a paper towel or the like where web strength is an important requirement. Note that the web is first compacted between roll 32 and 34, this reduces loft. Next embossing step takes place at "A" in Fig. 1 or alternatively at station 40 in Figure 1. In either case the wire carries the web through the embossing station and the embossing depth is very shallow (.005 inches to .0125 inches) see Col. 4 lines 5-6. A final application of a heavy layer of latex is sprayed on the thin web and evaporated. Although the text is not explicit it appears that this latex is carried throughout the caliper of the web.

The Kaiser refence 161 addresses the same problem in a different way. He address the problem by adding very long "textile" fibers to the air laid web and then relies on embossing in combination with a binder distributed through out the web to

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achieve the desired tensile strength. Kaiser notes that their process achieves adequate strength with low binder content.

The Applicant's invention differs from each reference and the claims are amended to reflect these important differences. The Applicant is not so concerned with the tensile mechanical properties of his product since it will be integrated into other structures for the ultimate consumer. The Applicant is after absorbency first with a substantial reduction is "dusting" or liberation of "lint" and "fluft". In the Applicant's process the compaction step of Schmidt is avoided as is the thermal bonding step. Note that in application figure 1 there are no opposed rolls prior to embossing. Note too that the heat in Applicant's process is to principally drive off moisture The claims are amended to point out the that air laid web is self supporting as it is transferred to the embossing station. The presence of a wire is excluded from the embossing station as well. Applicant's invention differs from both Schmidt and Kaiser in that the highly dilute latex material is a superficial treatment of the web and does not exhibit the properties of a Schmidt or Kaiser web.

With these amendments to the claim the claims do not read on either reference and are free of anticipation. The fact that the problem address by the Applicant is much different that the solutions presented by the references along with the failure of the references to teach the combination of the range limitations supports the view that the claim invention is not obvious. Using highly dilute latex material with a percentage of more than 90% of water rather is contra-intuitive because this leads to a higher effort when drying the web without improving the latex bonding of fibers and dust. It is the specific recognition of the inventors that a bonding of dust can be achieved by hydrogen bonding and only a very low proportion of latex.

Rejection under 35 U.S.C. §112

The Examiner noted a discrepancy in the wording in claim 1 and Applicant has removed "in particular" from the claims.

Claim 4-5 are amended to more clearly bracket the range limitations by narrowing them in the dependant claims.

CONCLUSION

All of the claims remaining in this application should now be seen to be in condition for allowance. The prompt issuance of a notice to that effect is solicited.

Respectfully submitted,

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